

SAMPLING REQUIREMENTS for TOXIC CHEMICAL TESTING

At a minimum, (for each day of sampling) one field duplicate and one equipment rinsate should be collected for each matrix sampled. If this frequency is not appropriate or applicable for the sampling equipment, sample type (e.g. manual grab vs. composite sample over a specific period) and method, then the appropriate changes should be clearly identified in the final report. A trip blank is required for each day that samples are collected for volatile organic analyses.

In addition, for each sampling event enough volume should be collected to allow the analytical laboratory to prepare one matrix spike, one matrix duplicate and where possible one matrix spike duplicate (or at least one matrix spike duplicate if a matrix duplicate is not possible for each analytical method employed).

Therefore the following control samples must be collected for toxic chemical testing for MDE 's Toxic Chemical Testing:

- 1. Field duplicate (one per day per matrix type)**
- 2. Equipment rinsate (one per day per matrix type)**
- 3. Trip blank (one per day, volatile organics only)**
- 4. Matrix spike (one per batch [of each matrix type])**
- 5. Matrix Spike Duplicate**

Any deviations from MDE's Toxic Chemical Testing Protocol must be reported in the final submission to MDE. Document the deviation, and the reason for the deviation. Any activity not performed in accordance with MDE's guidelines, 40 CFR Part 136, or the approved method and text reference is considered a deviation. An explanation that indicates whether or not the deviation is believed to have affected data quality must also be submitted.